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REMARKS

2 These remarks follow the order of the paragraphs of the office action. Relevant portions of the
3 office action are shown indented and italicized.

4 *Application/Control Number 10/619,988*
5 *Art Unit: 2182*

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

8 *1. A request for continued examination under 37 CFR 1.114 including the fee set forth in*
9 *37 CFR 1.17(e), was filed in this application after final rejection. Since this application is*
10 *eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR*
11 *1.17(e) has been timely paid, the finality of the previous Office action has been*
12 *withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/10/2006 has*
13 *been entered.*

Response to Arguments

15 *2. Applicants arguments with respect to claims 1-20 have been considered but are moot*
16 *in view of the new ground(s) of rejection.*

Drawings

18 *3. The drawings are objected to because black boxes need to be labeled as to their fu*
19 *notions:*

- 20 *o Fig. 2, elements 30 and 70;*
- 21 *o Fig. 6-8, elements 30 and 70;*
- 22 *o Fig. 10, element 830;*

23 *Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to*
24 *the Office action to avoid abandonment of the application. Any amended replacement*
25 *drawing sheet should include all of the figures appearing on the immediate prior version*
26 *of the sheet even if only one figure is being amended. The figure or figure number of an*
27 *amended drawing should not be labeled as "amended." If a drawing figure is to be*
28 *canceled, the appropriate figure must be removed from the replacement sheet, and where*
29 *necessary, the remaining figures must be renumbered and appropriate changes made to*
30 *the brief description of the several views of the drawings for consistency. Additional*
31 *replacement sheets may be necessary to show the renumbering of the remaining figures.*
32 *Each drawing sheet submitted after the filing date of an application must be labeled in*
33 *the top margin as either Replacement Sheet" or "New Sheet pursuant to 37 CFR 1*
34 *.121(d). If the changes are not accepted by the examiner, the applicant will be notified*

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and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: o Fig. 2, "connector 170" (see page 6, line 22); o Fig. 3, "user space 90" (see page 8, third paragraph) o Fig. 5, "PLB 390" (see page 15, third paragraph) Corrected drawing sheets in compliance with 37 CFR 1.12(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 2, "270". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

27 In response, the applicants respectfully states that corrected drawings that include replacement
28 sheets for sheets 1, 4, 5 and 7 are submitted herewith overcoming all the drawing objections.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

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1 *The language should be clear and concise and should not repeat information given in*
2 *the title. It should avoid using phrases which can be implied, such as. The disclosure*
3 *concerns, "The disclosure defined by this invention", "The disclosure describes." etc.*

4 In response, the applicants respectfully states that the abstract is corrected herewith to be clear
5 and concise and not repeat information given in the title.

6 ***Claim Rejections -35 USC § 112***

7 *7. The following is a quotation of the second paragraph of 35 U.S.C. 112:*
8 *The specification shall conclude with one or more claims particularly pointing out and*
9 *distinctly claiming the subject matter which the applicant regards as his invention.*

10 *8. Claims 9 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being*
11 *indefinite for failing to particularly point out and distinctly claim the subject matter*
12 *which applicant regards as the invention.*

13 *Claims 9, 17 and 16 include a limitation that recites an apparatus and is followed by*
14 *further limitations referring to parts of the apparatus that are not necessarily hardware*
15 *limitations, but clearly can be implemented in software. Generally, apparatus claims*
16 *should include limitations relating to tangible hardware elements.*

17 In response, the applicants respectfully states that claims 9 and 17-20 are amended to overcome
18 the rejection under 35 U.S.C. 112, second paragraph.

19 *Claim 19 has a preamble that claims two computer readable program code means,*
20 *however, only one appears necessary. The claim recites, "the computer readable*
21 *program code means in said article of manufacture comprising computer readable*
22 *program code means . Examiner will assume there is only one distinct computer readable*
23 *program code means, not two.*

24 *Claim 20 has a preamble claiming two methods, however, only one appears necessary.*
25 *The claim recites, said method steps comprising the steps of a method comprising...".*
26 *Examiner will assume there is only one distinct method, not two.*

27 In response, the applicants respectfully states that claims 19 and 20 are amended to overcome the
28 rejection under 35 U.S.C. 112, second paragraph.

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1 9. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite
2 for failing to particularly point out and distinctly claim the subject matter which
3 applicant regards as the invention.

4 *Claim 1 discloses a recites "...descriptor logic for generating in entirety a plurality of*
5 *descriptors including a frame descriptor..., a pointer descriptor..., and a descriptor table*
6 *for storing the descriptors...". "is unclear if the plurality of descriptors includes the*
7 *frame descriptor AND the pointer descriptor AND the descriptor table, or if the plurality*
8 *of descriptors includes just the frame descriptor. Examiner assumes the plurality of*
9 *descriptors only include at least the frame descriptor. Note that, given the above, the*
10 *descriptor logic is also unclear since it could generate in entirety the frame descriptor,*
11 *pointer descriptor and the descriptor table! or simply only needs to generate the frame*
12 *descriptor. The Examiner assumes the descriptor logic only needs to generate at least the*
13 *frame descriptor.*

14 *Claims 9,10 and 19-20 all have the same problems related as claim 1 described above*
15 *and therefore the rejection is applied accordingly.*

16 In response, the applicants respectfully states that the claims are amended to delete the term 'in
17 entirety' from all the claims. This overcomes the rejection of Claims 1-20 under 35 U.S.C. 112,
18 second paragraph.

19 *Claims 2-8 and 11-16 are rejected as being dependent on a rejected base claim.*

20 In response, the applicants respectfully states that the amendment of the independent claims
21 overcomes the rejection of the dependent claims.

22 *10. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for*
23 *failing to particularly point out and distinctly claim the subject matter which applicant*
24 *regards as the invention. It is unclear how a computer program product can comprise a*
25 *host processing system and apparatus. Examiner assumes that it is the data processing*
26 *system that comprises the host processing system and the apparatus.*

27 In response, the applicants respectfully states that claim 18 is amended to overcome the rejection
28 under 35 U.S.C. 112, second paragraph.

29 *11. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being*
30 *indefinite for failing to particularly point out and distinctly claim the subject matter*
31 *which applicant regards as the invention. All the independent claims recite the limitation*
32 *"descriptor logic" which very broad in scope. It is unclearly if descriptor logic is a*

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1 simple software constructs, large-scale software program, a handful of logically
2 interconnected hardware gates, a large complex hardware structure or any combinations
3 of the above hardware and software. The only reference in the specification that appears
4 to defines descriptor logic is on page 26, lines 8-11, ... Descriptor logic in the software
5 and in the ISOC 120 generate and modify the descriptors according to control measures
6 to be taken...". Examiner will assume descriptor logic is form of hardware and/or
7 software that generates the descriptor elements.

8 In response, the applicants respectfully states that the term 'descriptor logic' is used in the claims
9 as defined and described in the specification. As noted in the specification, the descriptor logic is
10 "for generating a plurality of descriptors including a frame descriptor defining a data packet to be
11 communicated between a location in the memory and the second data processing system, and a
12 pointer descriptor identifying the location in the memory; and a descriptor table for storing the
13 descriptors generated by the descriptor logic for access by the first and second data processing
14 systems."

15 ***Claim Rejections - 35 USC § 101***

16 12. 35 U.S.C. 101 reads as follows: *Whoever invents or discovers any new and useful*
17 *process, machine, manufacture, or composition of matter, or any new and useful*
18 *improvement thereof, may obtain a patent therefor, subject to the conditions and*
19 *requirements of this title.*

20 13. *Claims 1-8 are rejected under 35 U.S.C. 101 because the claims are not limited to*
21 *tangible embodiments. Claim 1 purports to be an apparatus, however there are not*
22 *hardware limitations describing the apparatus. A descriptor logic, pointer descriptor and*
23 *descriptor table are used by the apparatus but not part of the claim apparatus. They can*
24 *purely be functional descriptive material, per se, and do not require associated hardware*
25 *according to claim 1. Claims 2-8 are rejected based on being dependent on a rejected*
26 *base claim.*

27 In response, the applicants respectfully states that claim 1 is amended to clearly show it being a
28 *tangible embodiment.* This overcomes the rejection of Claims 1-8 under 35 U.S.C. 101.

29 14. *Claims 17,18 and 19 are rejected under 35 U.S.C. 101 because the claims are not*
30 *limited to tangible embodiments. In view of Applicant's disclosure the medium is not*
31 *limited to tangible embodiments, where there does not appear to be anything the prevents*
32 *the medium to be on a non-statutory embodiment such as a carrier wave. As such, the*
33 *claims are not limited to statutory subject matter and are therefore non- statutory. To*

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1 *overcome this rejection the claims need to be amended to include only the physical
2 computer media and not a communication/transmission media or other intangible or
3 non-functional media. Examiner recommends language such as "Computer usable
4 storage medium".*

5 In response, the applicants respectfully states that that claims 17,18 and 19 are amended to
6 clearly show each being a *tangible embodiment*. This overcomes the rejection of Claims 17,18
7 and 19 under 35 U.S.C. 101.

8

Double Patenting

9 *15. The nonstatutory double patenting rejection is based on a judicially created doctrine
10 grounded in public policy (a policy reflected in the statute) so as to prevent the
11 unjustified or improper timewise extension of the "right to exclude" granted by a patent
12 and to prevent possible harassment by multiple assignees. A nonstatutory
13 obviousness-type double patenting rejection is appropriate where the conflicting claims
14 are not identical, but at least one examined application claim is not patentably distinct
15 from the reference claim(s) because the examined application claim is either anticipated
16 by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140
17 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d
18 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re
19 Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164
20 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA
21 1969).*

22 *A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may
23 be used to overcome an actual or provisional rejection based on a nonstatutory double
24 patenting ground provided the conflicting application or patent either is shown to be
25 commonly owned with this application, or claims an invention made as a result of
26 activities undertaken within the scope of a joint research agreement.*

27 *Effective January 1, 1994, a registered attorney or agent of record may sign a
28 terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
29 37 CFR 3.73(b).*

30 *16. Claims 1-20 are provisionally rejected on the ground of nonstatutory
31 obviousness-type double patenting as being unpatentable over claims 1-20 of copending
32 Application No. 10/619960. Although the conflicting claims are not identical, they are*

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not patentably distinct from each other because the cover essentially identical scope. App. No 10/619960 appears broader not requiring the Logical Communication Port architecture or generation of the plurality of descriptors in entirety. The scope of the instant application is fully encompassed by the claims in App. No. 10/619960.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7 In response, the applicants respectfully states that it is planned to file a terminal disclaimer.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless (C) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant or patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. Claims 1,2,7-11 and 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat. No. 6,466,581 to Yee et al. (Yee).

21 In response, the applicant respectfully states that exception is taken with the equivalencies of
22 Claims 1,2,7-11 and 15-20 and Yee. The claims are apparently not anticipated by Yee. The
23 present invention, claimed in Claims 1,2,7-11 and 15-20, provides:

“Apparatus, methods and systems for controlling data flow between data processing systems. In an example embodiment, the apparatus includes descriptor logic for generating a plurality of descriptors including a frame descriptor defining a data packet to be communicated between a location in the memory and a data processing system, and a pointer descriptor identifying the location in the memory. The apparatus also includes a descriptor table for storing descriptors generated by the descriptor logic for access by the data processing systems.

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1 Whereas, the cited art to Yee, US Patent 6,466,581, filed: August 3, 1998, is entitled:
2 "Multistream data packet transfer apparatus and method". The abstract reads : "A multistream
3 data packet transfer apparatus and method receives data for at least one stream of multistream
4 data from multiple fragments of memory, over a bus from a first processor. The first processor
5 stores multistream data in the fragmented memory. An interface controller, such as any suitable
6 logic and /or software, evaluates the received data to determine which received data is usable
7 data for a second processor. A data packer removes unusable data and packs the usable data in
8 fixed sized units to form a data packet for the second processor. The data packer packs data
9 received from different fragments of memory as a single packet for use by a DSP requesting the
10 information".

11 *Thus, Yee is concerned with multistream data packet transfer not with controlling data flow*
12 *between data processing systems. Thus Claims 1,2,7-11 and 15-20 are not anticipated by Yee*
13 *and are allowable.*

14 19. Per claim 1, Yee discloses an apparatus (Fig. 1 is a multistream data packet transfer
15 apparatus; Column 3, lines 20-35 describe the apparatus in short) comprising:
16 descriptor logic (Fig. 3 shows various logic elements that directly deal with creation and
17 use; Fig. 3 element 150, for instance contains descriptors describing location of
18 descriptor table and size of data needed; Fig. 3, element 106 contains descriptor table
19 containing various descriptor entries), said apparatus for controlling flow of data
20 (descriptors control how "data streams" are utilized in multimedia processing in the
21 apparatus of Fig. 1; The "data streams" ate by definition "flows of data" used in real-
22 time multimedia applications. The descriptors in Yee control how the data streams are
23 processed; Fig. 4 is an illustration how data streams are controlled via descriptors)
24 between first and second data processing systems (Fig. 1, descriptor logic elements 100
25 and 106 control flow of data between host system CPU, element 104 and DSPs, elements
26 110 and 112; the host CPU is representative of the first data processing system and the
27 DSPs are representative of the second data processing system), via a memory (Figs. 1
28 and 3, element 106 show the descriptors that control the flow of data being stored in
29 system memory), said descriptor logic generating, n entirely, a plurality of descriptors
30 (Fig. 3, elements ISO and ICY; Column 7, lines 1+ disclose generating descriptors that
31 tracks up to 32 active data streams) including a frame descriptor defining a data packet
32 to be communicated between a location in the memory and the second data processing
33 system (Fig. 3, elements 150; Column 3, lines 40-50 and Column 7, lines 33-40 disclose a
34 descriptor that defines the size information of the data stream, the data stream being
35 associated with a data packet, "For each stream, one register in the groups contains...,
36 the size of descriptor table"; the descriptor table is in the memory, Fig. 3 element 106

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1 and contains detailed information about each stream and how the DSPs should handle
2 the stream, see Column I, lines 43-51. Note, nowhere in this limitation describes in any
3 detail whatsoever what it means to define a data packet, i.e., it could be a partial
4 definition or a full definition of all the details of a data packet or it can be simple a
5 pointer to another location where the data packet is defined, etc.), a pointer descriptor
6 identifying the location in memory (Fig. 3, elements 150; Column 3, lines 40-50, ".
7 descriptor table address location"); and a descriptor table for storing the descriptors
8 generated by the descriptor logic for access by the first and second data processing
9 systems (Fig. 3, element 107).

10 In response, the applicants respectfully states that exception is taken with the equivalencies of the
11 elements of claim 1 and Yee. Claim 1 reads:

12 1. An apparatus comprising:

13 descriptor logic on a computer readable medium, said apparatus for controlling flow of
14 data between first and second data processing systems via a memory, said descriptor logic
15 for generating a plurality of descriptors including a frame descriptor defining a data
16 packet to be communicated between a location in the memory and the second data
17 processing system,

18 a pointer descriptor identifying the location in the memory; and

19 a descriptor table for storing on the computer readable medium, the plurality of
20 descriptors generated by the descriptor logic for access by the first and second data
21 processing systems.

22 Yee is not concerned with 'descriptor logic' in the sense used in the claims and described in the
23 specification. Exception is taken with the office communication statement above:

24 "descriptor logic (Fig. 3 shows various logic elements that directly deal with creation and
25 use;"

26 Yee's logic elements are not the 'descriptor logic' of the present invention. Thus claim 1 and all
27 claims that depend thereupon are allowable over Yee.

28 20. *Per claims 9,10,17-20, claim 1 is substantially similar to claims 9,10,17-20 and*
29 *therefore the rejection is applied accordingly. Yee discloses an associated method with*
30 *the apparatus of claim 1 (Figs. 4 and 6), as well as associated computer program product*

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1 (Fig. 1), program storage device (Fig. 3, element 122 and 106) and article of
2 manufacture (Fig. 1). Specifically for claim 9, Fig. 1 is construed to be the data processing
3 system of the preamble, the data communication interface is the bus between host CPU
4 and DSP units. The PCI bus (Fig. 1, element 108) can communicate with multiple device
5 that is attached to it, being construed here as the data communications network of the
6 multiple devices.

7 In response, the applicants respectfully states that indeed as with claim 1, claims 9,10,17-20 are
8 allowable over Yee , each for itself and because it depends on an allowable claim.

9 21. Per claims 2, 7,11 and 15, Yee discloses claims 1 and 10, Yee further discloses using
10 a Logical Communications Port architecture (LCP is very generally defined on page 8,
11 lines 18-26 as "...a framework for the interface between local consumers running on the
12 host computer and adapter". It further goes on to using open-ended language as to
13 suggest what LCPs could have; Yee discloses interfacing between a host and secondary
14 DSP systems, e.g., the consumers and producers, via an controller adapter, element 100,
15 meeting this general definition of LCP), and the descriptor table is stored in the first data
16 processing system (Fig. 3, clement 106 is system memory, by definition being the host
17 CPU memory as shown in Fig. 1). The first data processing system comprises a host
18 computer system (Fig. 1, element 104, host CPU).

19 In response, the applicants respectfully states that it is shown that Yee is not concerned with the
20 elements of claim 1 or 10. Continued exception is taken with the equivalencies of Claims 2, 7,11
21 and 15 and Yee. Although, some similar words used, the combination is in a different context
22 than indicated in the office communication. Thus, claims 2, 7,11 and 15 are allowable over Yee ,
23 each for itself and because it depends on an allowable claim.

24 22. Per claims 8 and 16, Yee discloses claims 1 and 10, Yee further discloses the second
25 data processing system (Fig. 1, elements 110 and 112) comprising a data communication
26 interface (Fig. 1, buses 130 and 132) for communicating data between host computer
27 (Fig. 1, element 104) and data communications network (Fig. 1, element 108).

28 In response, the applicants respectfully states that it is shown that Yee is not concerned with the
29 elements of claim 8 or 16. Continued exception is taken with the equivalencies of claims 8 and
30 16, and Yee. Although, some similar words used, the combination is in a different context than
31 indicated in the office communication. Thus, claims 8 and 16 are allowable over Yee, each for
32 itself and because it depends on an allowable claim.

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1 ***Claim Rejections -35 USC § 103***

2 *23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all*
 3 *obviousness rejections set forth in this Office action:*

4 *(a) A patent may not be obtained though the invention is not identically disclosed or*
 5 *described as set forth in section 102 of this title, if the differences between the subject*
 6 *matter sought to be patented and the prior art are such that the subject matter as a whole*
 7 *would have been obvious at the time the invention was made to a person having ordinary*
 8 *skill in the art to which said subject matter pertains. Patentability shall not be negated*
 9 *by the manner in which the Invention was made.*

10 *24. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ*
 11 *459 (1966), that are applied for establishing a background for determining obviousness*
 12 *under 35 U.S.C. 103(a) are summarized as follows:*

- 14 *1. Determining the scope and contents of the prior art.*
- 15 *2. Ascertaining the differences between the prior art and the claims at Issue.*
- 16 *3. Resolving the Level of ordinary skill in the pertinent art.*
- 17 *4. Considering objective evidence present in the application indicating obviousness or*
 18 *non-obviousness.*

19 *25. This application currently names joint inventors. In considering patentability of the*
 20 *claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the*
 21 *various claims was commonly owned at the time any invention covered therein were*
 22 *made absent any evidence to the contrary. Applicant is advised of the obligation under 37*
 23 *CFR 1.56 to point out the inventor and invention dates of each claim that was not*
 24 *commonly owned at the time a later invention was made in order for the examiner to*
 25 *consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)*
 26 *prior art under 35 U.S.C. 103(a).*

27 *26. Claims 3 and 12 are rejected under 35 USC 103(a) as being unpatentable over Yee.*
 28 *Yee discloses claims 1 and 10 of which claims 3 and 12 depend. Yee further discloses*
 29 *descriptor tables being accessible by the second processing system (Fig. 4, descriptors let*
 30 *DSP access data streams for processing). Yee does not disclose expressly the descriptor*
 31 *table being stored in the second processing system.*

32 *At the time of the invention it would have been obvious to a person of ordinary skill in*
 33 *the art to implement the descriptor tables in the second processing system, where the*
 34 *DSP units (Fig. 3, elements 110 and 112) are located.*

35 *The suggestion/motivation for doing so would have been a matter of design choice ('cc*
 36 *has the host processor generate the descriptor tables (Fig. 4, element 200), so the host*
 37 *system memory (Fig. 3, element 106) would logically be used to store the descriptor*
 38 *tables, which Yee does (Fig. 3, element 107). However, the tradeoff here is the increased*
 39 *latency subjected to the DSP units in reading from the descriptor tables, having to*
 40 *traverse multiple interfaces (Fig. 3, PCI bus, at minimum, must be arbitrated for to get*

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1 access to Descriptor Tables). If the host processor stored the descriptor tables in a
2 memory directly connected to DSP units, the latency to access the descriptor tables by the
3 DSP units would be significantly reduced, with the tradeoff here being host write of
4 descriptor tables being slower.

5 Therefore, it would have been obvious to implement the descriptor tables on the second
6 data processing system for faster access by the DSP units.

7 In response, the applicants respectfully states that exception is taken with the equivalencies of the
8 elements of claim 1 and Yee. Yee is not concerned with 'descriptor logic' in the sense used in the
9 claims and described in the specification. Particular exception is taken with the office
10 communication statement above:

11 "Therefore, it would have been obvious to implement the descriptor tables on the second
12 data processing system for faster access by the DSP units."

13 It would not be obvious to use descriptor tables in an application not concerned with descriptor
14 logic. Yee's logic elements are not the 'descriptor logic' of the present invention. Thus claims 1
15 9 and 10, and all claims that depend thereupon are allowable over Yee, including claims 3 and
16 12.

17 *27. Claims 4-6, 13 and 14 are rejected under 35 USC 103(a) as being unpatentable over
18 Yee in view of US Pat. Pub. No. 2002/0083341 to Feuerstein et al. (Feuerstein).*

19 In response, the applicants respectfully states that continued exception is taken with the
20 equivalencies of the elements of Claims 4-6, 13 and 14 and Yee with or without Feuerstein. The
21 cited art to Feuerstein, US Patent 2002/0083341, filed: December 27, 2000, is entitled: "Security
22 component for a computing device". The Feuerstein abstract reads :

23 "A security component determines whether a request for a resource poses a security risk
24 to a computing device and verifies the integrity of the requested resource before the
25 request is allowed. For a request having arguments and a resource path with a filename
26 that identifies the resource, the security component determines that the request does not
27 pose a security risk if the resource path does not exceed a maximum number of
28 characters, individual arguments do not exceed a maximum number of characters, the
29 arguments combined do not exceed a maximum number of characters, and the filename
30 has a valid extension. The security component verifies the integrity of a requested

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1 resource by formulating a descriptor corresponding to the resource and comparing the
2 descriptor with a cached descriptor corresponding to the resource".

3 Thus Feuerstein is not related to the technology of the present invention. There is apparently no
4 reason to make the combination of Lee and Feuerstein except in an attempt to find the elements of
5 the present claims, especially when neither reference cites the other. This is using hindsight
6 which is not proper.

7 *Yee discloses claims 1 and 10 of which claims 4-6, 13 and 14 depend.*
8 *Yee does not disclose expressly generating a branch descriptor comprising a link to*
9 *another descriptor in the descriptor table whereby the descriptor table has a plurality of*
10 *descriptor lists sequentially linked via branch descriptors, at least one of these lists being*
11 *cyclic.*

12 *Feuerstein discloses descriptors having branch descriptors that have a link to another*
13 *descriptor in a descriptor table (Paragraph 38, Fig. 2, element 206), such that the*
14 *descriptors are related in a cycle (Fig. 3).*

15 *Yee and Feuerstein are analogous art because they are from the same field of utilizing*
16 *descriptor lists and tables to determine how to handle data transfer between two distinct*
17 *systems. At the time of the invention it would have been obvious to a person of ordinary*
18 *skill in the art to implement the branch descriptors of Feuerstein in Yee. The*
19 *suggestion/motivation for doing so would have been to enable a security function to*
20 *verify the integrity of a requested resource (Abstract of Feuerstein).*

21 *Therefore, it would have been obvious to combine Yen with Feuerstein for the benefit of*
22 *improved security in data communication between two data processing systems.*

23 In response, the applicants respectfully states that, even the combined art does not make Claims
24 4-6, 13 and 14 obvious. Neither reference is associated with descriptor logic. Thus Claims 4-6,
25 13 and 14 are allowable over the combined art.

26 Claim 21 added to protect a detailed embodiment of the present invention. It is noted that a new and
27 novel combination of even known elements is allowable.

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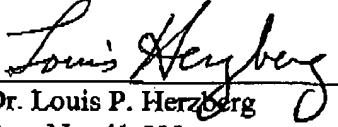
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- 1 It is anticipated that this amendment brings claims 1-21 to allowance. If any questions remain,
- 2 please contact the undersigned representative before issuing a FINAL action.
- 3 Please charge any fee necessary to enter this paper to deposit account 50-0510.

4

Respectfully submitted,

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6 
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